



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,113	11/21/2006	Chihiro Hirose	8091-1003	7041
466	7590	08/19/2009	EXAMINER	
YOUNG & THOMPSON			LICHTI, MATTHEW L	
209 Madison Street				
Suite 500			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			3663	
			MAIL DATE	DELIVERY MODE
			08/19/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/594,113	HIROSE, CHIHIRO	
	Examiner	Art Unit	
	Matthew Lichti	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 05/11/2009.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 11, 15-18, and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 11, 15-18, and 22-25 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 03/06/2009.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

DETAILED ACTION

Response to Amendment/Remarks

1. The rejections under 35 USC 101 has been withdrawn in view of the amendments and arguments. The methods are tied to a particular machine (navigation apparatus) and are therefor statutory under the machine-or transformation test.
2. The rejections under 35 USC 112, first paragraph has been withdrawn. The original rejection was caused by a misunderstanding of the process performed after judging that the distance is smaller than the threshold which is decided in step s412 of figure 4. When the first distance is larger than a threshold, steps S412, S413, S414, and S502 of figure 5 to be performed. It is now understood that the ordinary research of step S502 searches for a route passing through the first planned route point N-IC, as recited in claim 17.
3. The rejections under 35 USC 112, second paragraph are moot in view of the cancellation of the rejected claims.
4. The amendments to claims 11 and 18 to include the distance histories overcome the rejections under 35 USC 102. Endo uses the trend of distances to the different waypoints, but not a trend of distances to one particular waypoint over time.
5. In response to the arguments regarding distances D1 and D2 of Endo (page 12-13 of arguments), the distance D1 of Endo is a linear distance from the deviated points to the waypoints, which reads on the distance calculations of applicant's independent claims. The independent claims only recites how the route is searched **when** the first distance is increasing **and** the second distance is decreasing, but does not discuss

what happens in any other circumstance such as both increasing or both decreasing, and does not rule out using other variables such as Endo's distance D2 from waypoints to the destination. Since distance D2 is a distance from a waypoint to the destination, it will not change over time, and therefore will not affect whether the weighted distance D is increasing or decreasing trend.

6. Applicant argues (page 13) that Endo does not teach judging not to pass a first planned waypoint when the first distance is an increasing trend and the second distance is a decreasing trend. While Endo does not teach this limitation, the English abstract of Ozawa teaches that it will not pass a planned route point if the distance to the point is "larger than the distance previously measured", which means it is an increasing trend. It would have been obvious to apply the teaching of not passing any waypoints in which the distance is increasing to the invention of Endo, so that the waypoints in which the distance is increasing are not passed, and at least one of the waypoints in which the distance is increasing is passed.

Claim Objections

7. Claim 25 is objected to because of the following informalities: The last paragraph of page 7 recites "judging whether that..." The word "whether" should be deleted in order to fix the grammar. Appropriate correction is required.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 11, 15-18, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al. (U.S. Patent 5,902,349) in view of Ozawa (Japanese Patent Publication 2000-193478 using English abstract and English machine translation of the detailed description).

10. Regarding claims 11, 18, and 25, Endo et al. disclose a navigation apparatus comprising:

A guiding unit configured to guide a route to a destination (guide route controller 21, col. 12, lines 4-19).

a deviation judging unit (fig. 4, map matching controller 21) configured to judge whether a moving object has deviated from a guided route (NVP1, col. 12, lines 34-35) to a destination (fig. 4, map matching controller 21 sends off-route signal 22, col. 13, lines 51-54, fig. 9, step 2);

a re-searching unit (fig. 4, guide route controller 23) configured to re-search a route to the destination when the deviation judging unit judges that the moving object has deviated from the guided route and in response to the route being re-searched, the guiding unit is configured to guide the re-searched route (fig. 9, step 6, col. 14, lines 16-20).

a distance calculating unit (fig. 4, guide route controller 23, col. 13, line 65 – col. 14, line 5) configured to calculate a first distance and a second distance (fig. 10, linear distances D1), the first distance being a distance from a deviated point to a (triangle Pc of fig. 10) to a first planned route point (figs. 5, 10, 11, & 22, Xs or dots for nodes), the second distance being a linear distance from the deviated point to a second planned route point (figs. 5 & 10, linear distance D1 to a different node), when the deviation judging unit judges that the moving object has deviated from the guided route before passing through the first planned route point;

a route judging unit (fig. 4, guide route controller 23) configured to judge whether to pass the first planned route point and second planned route point based on the distances to the first and second planned route points (fig. 9, step 5, fig. 10 determines which route points X to pass based on distance D1, col. 14, lines 1-15); and

wherein the re-searching unit (fig. 4, guide route controller 23) is configured to re-search a route passing the second planned route point without passing the first planned route point when the route judging unit judges that the first planned route point is not to be passed (fig. 10, route to a second pre-planned route point skips other first pre-planned route points, fig. 9, step 6, col. 14, lines 16-20).

However, Endo do not specifically disclose judging that the first planned route point is to be passed when the first distance is increasing and the distance to a second point is decreasing.

Ozawa (abstract) teaches that it will not pass a planned route point if the distance to the point is “larger than the distance preciously measured”, which means it is an

increasing trend. It would have been obvious to apply the teaching of not passing any waypoints in which the distance is increasing to the invention of Endo, so that the waypoints in which the distance is increasing are not passed, and at least one of the waypoints in which the distance is increasing is passed.

11. Regarding claims 15 and 22, Endo et al. disclose a presenting unit (fig. 4, display 2, audio 7) configured to present, when the route judging unit judges that the planned route point is not to be passed, that the planned route point is not to be passed (figs. 10 & 11, presents route to the return point bypassing the nodes that it determines are not to be passed, col. 14, lines 16-24).

12. Regarding claims 16 and 23, Endo et al. disclose a presenting unit (fig. 4, display 2, audio 7) configured to present a content to confirm whether to pass the planned route point when the route judging unit judges that the planned route point is not to be passed (figs. 10 & 11, presents route to the return point bypassing the nodes that it determines are not to be passed, col. 14, lines 16-24; col. 15, lines 44-52); and an acquiring unit (fig. 4, controller 23 senses via GPS 4 and other sensors 5, 6, 20, 21, that user drove to the return point indicated by presentation display 2 or audio 7, or user input via remote control 7, col. 15, lines 52-63, figure 5, steps 4, 5, 7, 10) configured to acquire information indicative of an instruction in response to the confirmation, wherein

the re-searching unit (fig. 4, controller, 23) configured to re-search a route based on the instruction (fig. 12, steps 7, 8, 10, col. 15, line 49 – col. 16, line 13).

13. Regarding claim 17 and 24, Endo et al. disclose the route judging unit is configured to judge that the planned route point is to be passed based on distance thresholds (distance D to the other nodes are threshold distances for determining if a node is to be passed, col. 14, lines 1-15 & 57-62, distance thresholds D3, col. 15, line 64 – col. 16, line 4). It would have been obvious to use any distance as a threshold for calculating a route because distance thresholds are well known in the art.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Lichti whose telephone number is (571) 270-5374. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on (571)272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. L./

Art Unit: 3663

Examiner, Art Unit 3663

/Jack W. Keith/

Supervisory Patent Examiner, Art Unit 3663